Amendments to the Claims:

1-10. (Cancelled)

11. (Previously presented) An isolated biologically active beta-secretase polypeptide selected from the group consisting of:

a) the polypeptide of SEQ ID NO: 4;

b) a polypeptide having one to fifty conservative amino acid changes as compared with the polypeptide of SEQ ID NO: 4, wherein said polypeptide includes the transmembrane domain; and

c) the polypeptide encoded by the DNA vector insert of ATCC Deposit No. 207159.

12. (Previously presented) An isolated biologically active beta-secretase polypeptide encoded by a nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule as set forth in SEQ ID NO:1;

b) a nucleic acid molecule encoding the polypeptide of SEQ ID NO: 4;

c) a nucleic acid molecule of the DNA vector insert in ATCC deposit No. 207159; and

d) a nucleic acid molecule encoding one to fifty conservative amino acid substitutions as compared with the polypeptide of SEQ ID NO:4, wherein said polypeptide includes the transmembrane domain.

13. (Original) An isolated polypeptide having the amino acid sequence of SEQ ID NO: 4.

14. (Currently amended) An isolated biologically active polypeptide selected from the group consisting of: amino acids 45-501; amino acids 46-501; amino acids 62-501.

15-21. (Cancelled)

22. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 11, wherein the polypeptide is the polypeptide of SEQ ID NO: 4.

23. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 11, wherein the polypeptide has one to fifty conservative amino acid changes as compared with the polypeptide of SEQ ID NO: 4, wherein said polypeptide includes the transmembrane domain.

24. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 11, wherein the polypeptide is encoded by the DNA vector insert of ATCC Deposit No. 207159.

25. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule as set forth in SEQ ID NO:1.

26. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule encoding the polypeptide of SEQ ID NO: 4.

27. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule of the DNA vector insert in ATCC deposit No. 207159.

28. (Previously presented) The isolated biologically active beta-secretase polypeptide of claim 12, wherein the polypeptide is encoded by a nucleic acid molecule encoding one to fifty conservative amino acid substitutions as compared with the polypeptide of SEQ ID NO:4, wherein said polypeptide includes the transmembrane domain.